



CHB150W8 SERIES

150 WATT 8:1 INPUT

DC-DC CONVERTERS

SINGLE OUTPUT

FEATURE

- * 150W Isolated Output
- * Efficiency to 92.5%
- * Fixed Switching Frequency
- * Input Under Voltage Protection
- * Over Temperature Protection
- * Over Voltage/Current Protection
- * Remote On/Off
- * Industry Standard Half-Brick Package
- * Fully Isolated 1500VDC



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.			CAPACITIVE LOAD MAX.
			MIN.	MAX.	NO LOAD	FULL LOAD	(2)	(1)	(3)	
CHB150W8-36S05	9-75 VDC	5 VDC	0 mA	30 A ⁽⁵⁾	150 mA	4.71 A	88	88.5	88.5	10000 μ F
CHB150W8-36S12	9-75 VDC	12 VDC	0 mA	12.5 A	150 mA	4.53 A	92	92	91	5000 μ F
CHB150W8-36S15	9-75 VDC	15 VDC	0 mA	10 A	150 mA	4.50 A	92	92.5	92.5	5000 μ F
CHB150W8-36S24	9-75 VDC	24 VDC	0 mA	6.25 A	60 mA	4.66 A	89.5	89.5	89	2000 μ F ⁽⁴⁾
CHB150W8-36S28	9-75 VDC	28 VDC	0 mA	5.35 A	60 mA	4.62 A	90	90	89.5	1500 μ F ⁽⁴⁾
CHB150W8-36S48	9-75 VDC	48 VDC	0 mA	3.13 A	60 mA	4.64 A	90.5	90	89.5	1000 μ F ⁽⁴⁾

NOTE:

1. Nominal Input Voltage 36 VDC
2. Measured at 24Vin
3. Measured at 48Vin
4. The output terminal of 24, 28, 48Vout models required a minimum capacitor 100 μ F to maintain specified regulation.
5. CHB150W8-36S05 Vin=9-12V, Output Current =0.8*Io max.

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS:

Operating Input Voltage Range 36V 9-75V
 Input Surge Voltage (100ms max.) 100Vdc max
 Under Voltage Lockout power up 9.5V
 power down 8.0V
 Positive Logic Remote On/Off (see note 4&5)
 Input Filter LC Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy ±1.5% max.
 Transient Response:25% Step Load Change <500µs
 External Trim Adj. Range (note6) ±10%
 Ripple & Noise, 20MHz BW
 5V 40mV RMS, 100mV pk-pk max.
 12V&15V 60mV RMS, 120mV pk-pk max.
 24V&28V 100mV RMS, 280mV pk-pk max.
 48V 200mV RMS, 480mV pk-pk max.
 Temperature Coefficient ±0.03%/°C
 Short Circuit Protection Continuous
 Line Regulation(note1) ±0.2% max.
 Load Regulation(note2) ±0.2% max.
 Over Voltage Protection Trip Range, % Vo nom. 115-140%
 Current Limit 105% - 200% Nominal Output
 Start up time 110ms typ.

GENERAL SPECIFICATIONS:

Efficiency See Table
 Isolation Voltage Input/Output 1500VDC min.
 Input/Case, Output/Case 1500VDC min.
 Isolation Resistance 10⁷ ohm min.
 Isolation Capacitance 5V/12V/15V 3500pF typ.
 24V/28V/48V 2500pF typ.
 Switching Frequency 200KHz typ.
 Operating Case Temperature -40°C to 100°C
 Storage Temperature -55°C to +105°C
 Thermal Shutdown, Case Temperature 110°C Typ.
 Humidity 95% RH max. Non condensing
 MTBF MIL-STD-217F T.B.D. hrs
 Dimensions 2.28x2.40x0.5 inches (57.9x61.0x12.7 mm)
 Case Material Aluminum Baseplate with Plastic Case
 Weight 109g

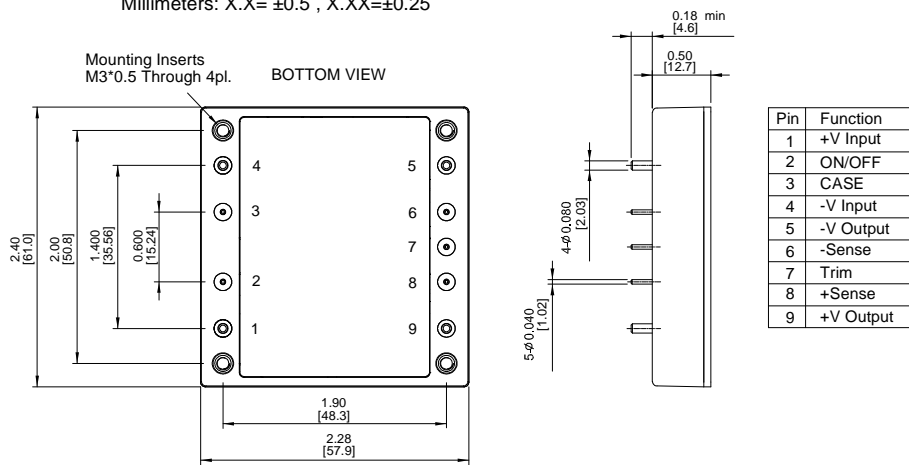
NOTE:

- Measured from high line to low line.
- Measured from full load to zero load.
- Output ripple and noise measured with 10uF tantalum (for 48Vout with 10uF aluminum) and 1uF ceramic capacitor across output.
- Logic compatibility open collector ref. to -input
 Module on >3.5Vdc to 75Vdc or open circuit
 Module off < 1.2Vdc
- Suffix "N" to the model number with negative logic remote on/off
 Module on >3.5Vdc to 75Vdc or open circuit
 Module off >3.5Vdc to 75Vdc or open circuit
- The input external capacitor recommend to parallel with 330uF ESR<0.7Ω to reduce the input ripple voltage.

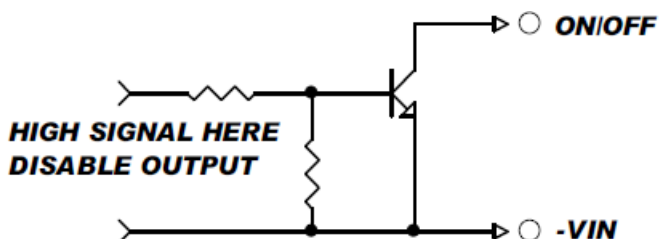
CASE HB

All Dimensions In Inches(mm)

Tolerances Inches: X.XX= ±0.02 , X.XXX= ±0.010
 Millimeters: X.X= ±0.5 , X.XX=±0.25



REMOTE ON/OFF CONTROL



EXTERNAL OUTPUT TRIM

